AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of Claims</u>:

1. (Currently Amended) A method for automatic system provisioning for an optical network by a network management system, <u>the optical network comprising a plurality of network elements, the method</u> comprising:

detecting a <u>one of the plurality of network elements having</u> new equipment to be provisioned in the optical network, the new equipment being of an equipment type;

automatically selecting a predefined default equipment template corresponding to the type of the new equipment, the selected predefined equipment template comprising a set of equipment parameters and associated predefined values; and

automatically provisioning the new equipment using the predefined values associated with the set of parameters contained in the default equipment template.

2. (Original) The method for automatic provisioning of claim 1, wherein the automatically selecting comprising selecting from a set of predefined default equipment templates, the set of predefined default equipment templates including at least one

default equipment template selected from the group consisting of DS3, DS1, OC3, OC48, OC12, and OC192 equipment templates.

3. (Original) The method for automatic provisioning of claim 1, further comprising:

automatically determining if there is a default equipment protection template corresponding to the equipment type;

automatically selecting a default equipment protection template corresponding to the equipment type of the new equipment, the selected default facility template comprising a set of equipment protection parameters and associated predefined values; and

automatically provisioning equipment protection for the new equipment using the predefined values associated with the set of equipment protection parameters contained in the corresponding default equipment protection template.

4. (Original) The method for automatic provisioning of claim 3, wherein the new equipment is one of equipment type DS1 and DS3.

5. (Original) The method for automatic provisioning of claim 1, further comprising:

automatically selecting a default facility template

corresponding to a facility of the new equipment, the selected default facility template comprising a set of facility parameters and associated predefined values; and

automatically provisioning the facility of the new equipment using the predefined values associated with the set of facility parameters contained in the corresponding default facility template.

6. (Currently Amended) The method for automatic provisioning of claim 1, wherein the detecting of the addition of the new equipment comprises receiving a notification transmission from one of the new equipment and a the network element, in which the new equipment being part of the network element is implemented.

7. (Currently Amended) The method for automatic provisioning of claim 1, wherein the detecting of the addition of the new equipment comprises:

transmitting inventory requests to the network elements of the network;

receiving responses to the inventory requests from the network elements; and

comparing an equipment database of the network management system with the responses to detect new equipment to be

provisioned.

8.   (Currently   Amended)   A   system   for   automatic   system
provisioning   for   an   optical   network   by   a   network   management
system, comprising:

a network interface for receiving information from network
elements of the optical network; and

a   processor   configured   to   automatically   detect   a   new
equipment to be provisioned in the optical network based on the
received information from the network elements, the new equipment
being of an equipment type, the processor ~~is~~ being further
configured to automatically select a predefined default equipment
template corresponding to the type of the new equipment, the
selected   predefined   equipment   template   comprising   a   set   of
equipment parameters and associated predefined values,

wherein the processor is configured to automatically transmit
via the network interface the predefined values associated with
the set of parameters contained in the default equipment template
to automatically provision the new equipment.

9. (Original) The system for automatic provisioning of claim
8, wherein the processor is configured to automatically select the
template from a set of predefined default equipment templates, the

set of predefined default equipment templates including at least one default equipment template selected from the group consisting of DS3, DS1, OC3, OC48, OC12, and OC192 equipment templates.

10. (Currently Amended) The system for automatic provisioning of claim 8, wherein the processor is further configured to:

automatically determine if there is a default equipment protection template corresponding to the equipment type of the new equipment; ~

automatically select a default equipment protection template corresponding to the equipment type of the new equipment, the selected default ~~facility~~ equipment protection template comprising a set of equipment protection parameters and associated predefined values; and

automatically transmit via the network interface the predefined values associated with the set of equipment protection parameters contained in the default equipment protection template to automatically provision the new equipment.

11. (Original) The system for automatic provisioning of claim 10, wherein the new equipment is one of equipment type DS1 and DS3.

12. (Original) The system for automatic provisioning of claim 8, wherein the processor is further configured to:

automatically select a default facility template corresponding to a facility of the new equipment, the selected default facility template comprising a set of facility parameters and associated predefined values and

automatically transmit via the network interface the predefined values associated with the set of facility parameters contained in the corresponding default facility template to provision the facility of the new equipment.

13. (Original) The system for automatic provisioning of claim 8, wherein the network interface is further configured to receive a notification transmission from one of the new equipment and a network element, the new equipment being part of the network element.

14. (Currently Amended) The system for automatic provisioning of claim 8, wherein the processor is further configured to:

transmit inventory requests to network elements of the network via the network interface,

receive responses to the inventory request via the network interface, and

compare an equipment database of the network management system with the responses to detect new equipment to be provisioned.

15. (New) The method of claim 1, wherein the detecting is performed in response to the new equipment being inserted in a back plane slot of the detected network element.

16. (New) The method of claim 15, wherein the detected network element is a trans-metro optical (TMO) switch and the new equipment comprises at least one of the following: a tributary card, a trunk card, and a cross-connect card.

17. (New) The system of claim 8, wherein the detected new equipment is a card inserted into a back plane slot in one of the network elements.

18. (New) The system of claim 17, wherein the one of the network elements is a trans-metro optical (TMO) switch and the inserted card comprises at least one of: a tributary card, a trunk card, and a cross-connect card.